





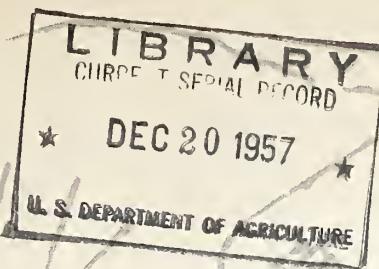
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Marketing Research Report No. 202



# **THE WAGE FACTOR IN RETAILING MEAT in 4 cities**

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a study of marketing  
of agricultural products

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Agricultural Marketing Service  
Marketing Research Division

U.S. Department of Agriculture  
Washington, D.C.



## PREFACE

This report on the wage factor in the cost of retailing meat is one of a group of reports dealing with the marketing of agricultural products issued by the Marketing Research Division, Agricultural Marketing Service, U. S. Department of Agriculture. This study was part of a broad program of research requested by Congress, directing the Department of Agriculture to make special studies involving food marketing costs. Research in this area also has been recommended by the Food Distribution Research and Marketing Advisory Committee.

Farmers expect their prices to move up and down with fluctuations in demand and changes in the volume of farm marketings. Consumers expect their prices to change in line with changes in farm prices. Both groups have turned to the Department for an explanation of food prices, including the prices of animals and meat.

In meat products, fluctuations in dollar margins come about because cattle and beef and hog and pork prices do not maintain a fixed relationship to one another at any point in the marketing channel. But a widening or narrowing longtime trend in margins is a clear indication of changes in the costs of performing the marketing service or of changes in profits. The cost factors in providing marketing services include labor costs. Wage rates which, to some extent, determine labor costs, vary and have been increasing.

This report attempts to explain and evaluate the variations in the wage bills for retailing meat. The study is limited in scope to the degree that only 46 stores in 4 cities were included in the survey. The research on which the report is based is part of an overall program designed to help improve the efficiency of marketing and expand the markets for farm products. The program involves the study of food marketing costs, ways to reduce such costs, and ways to improve quality, services, or handling methods which might increase the demand for farm products.

November 1957

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THE WAGE FACTOR IN RETAILING MEAT IN 4 CITIES

A study of marketing of agricultural products

By Imogene Bright, agricultural economist  
Marketing Research Division

SUMMARY

Wage rates, hours worked, and institutional factors, such as those establishing premium payments for overtime work, all contribute to labor costs. In this survey of the meat departments of selected food stores in San Francisco, Calif., Chicago, Ill., Atlanta, Ga., and Columbia, S. C., attention has been given to employment practices and direct wage payments. Attention was focused on the major differences among stores and among cities with respect to sales, wages, and employment practices.

Wage rates paid to employees in the meat departments of the stores in these four cities differed markedly. This variation was greatest in Columbia, S. C., and in Atlanta, Ga. However, some variation existed even among stores in Chicago and San Francisco.

Stores included in the survey also differed quite markedly with respect to store practices as well as employment practices--hours worked, payment of premium for overtime work, methods of scheduling work, use of part-time workers, and payment of fringe benefits. An attempt was made to determine the occurrence of these practices; however, it was not possible, owing to the nature and scope of the survey, to determine the cost of many of these employment practices.

Stores visited in the survey reported a wide range in hours of meat department operation. When the meat department was open longer than the hours usually worked by one employee, methods of scheduling work included: Split shift, staggered hours, staggered days, overtime, and part-time work. Overtime work was a common practice in 19 of the 46 stores visited. Differences were observed among cities in the practices followed in paying a premium for overtime work, and this premium went into effect under different circumstances. Part-time workers were hired during the week selected for survey purposes in 19 of the 46 stores.

Supplementary wage payments were reported by 14 of the 46 stores. The most common types of payments were commissions or bonuses to the meat manager or head meatcutter and, in some instances, journeymen meatcutters.

In addition to bonuses or commissions, other fringe benefits which were reported were: Paid vacations; paid holidays; paid sick leave; uniforms; and payments, in part at least, by management for pensions, hospitalization, and medical care. Paid vacations and paid holidays were reported in about 96 percent of the stores. Over 40 percent of the stores paid, at least in part, for hospitalization, medical care, and sick leave.

The wage bill for employees in the meat departments of the stores visited varied. This was due to several factors: The kind of employee hired, for example, journeymen or apprentice meatcutters; the number of employees hired; hours worked; wage rates paid; and premium payments. An average wage bill per employee man-hour computed for each city on the basis of information provided by the stores was: San Francisco \$2.58, Chicago \$2.44, Atlanta \$1.59, and Columbia \$1.10.

An analysis was made showing the wage bill for direct labor as a percentage of sales. For all stores included in the survey, the median percentage was 8.6. This percentage for each of the cities was: San Francisco 10.9, Chicago 10.1, Columbia 6.3, and Atlanta 7.4. However, the percentage among stores within the cities ranged from 7.4 to 14.9 in San Francisco; 5.4 to 16.5 in Chicago; 5.6 to 43.3 in Columbia; and 4.1 to 10.6 percent in Atlanta. When all union stores were compared with all nonunion stores in all four cities, the median percentage was different for the two groups, but this difference was not statistically significant. In Atlanta, where stores of both kinds were visited, little difference appeared between the median percentage for union and nonunion stores. No doubt, a factor in this comparison of all union and all nonunion stores was the marked difference in wage rates in San Francisco and Chicago, where all stores visited were union stores, and in Columbia and Atlanta, where the nonunion stores were located. Unionization, as such, did not appear to be directly related to the difference between union and nonunion stores in the relationship of the wage bill to sales. Rather, these differences may have reflected prevailing wage rates or other factors of these cities.

Productivity of workers was measured in terms of meat sales per man-hour. Although there were marked differences among stores within cities, there were also differences among the four cities. Average meat sales per man-hour based on the stores visited were: San Francisco \$24.60, Chicago \$26.09, Atlanta \$23.43, and Columbia \$14.99. Much of this variation is explained by the number of hours operated. In addition, prices of meat products may have influenced the sales reported.

Various factors that might have influenced the ratio of the wage bill to sales were observed; these were: Volume of sales, method of selling, hours of operation, and unionization. Volume of sales was the most important of these factors. Variation in sales volume was more important than the wage rates prevailing in the various cities in determining the relationship between the wage bill and sales. Frequently stores paying low wage rates had wage bills which were a large percentage of sales because sales volume was small. Conversely, owing to a large sales volume, some stores had wage bills which represented a small percentage of sales even though the stores paid higher wage rates.

## BACKGROUND

Livestock producers, as well as consumers and marketing agencies, are concerned with the efficiency with which meat is marketed. To the extent that changes in the costs and profits incurred in retailing are reflected in retail prices of meat, they may also have an influence on quantities of meat purchased by consumers. This, in turn, may have a variety of repercussions on the markets for livestock.

The importance of retailers' costs is indicated by the fact that in 1956 the retailer's margin for beef, pork, and lamb averaged \$14.10 per hundred pounds carcass weight. 1/

Because the cost of labor in the retail store is one of the more important of the costs paid by the retailer, attention is given in this report to employment practices and wage payments in the retailing of meat and to some of the factors influencing labor costs.

In 1956 a survey was made of the meat departments of retail stores located in four cities--San Francisco, Calif.; Chicago, Ill.; Atlanta, Ga.; and Columbia, S. C. Data were collected for 1 week covering meat sales, wage payments, and employment practices pertaining to persons working in the meat departments of the retail stores selected. Attention was focused on the major differences between stores and between cities with respect to sales, wages, and employment practices. Because the number of stores included in the survey is so small, intercity differences could not be measured precisely, but information obtained from these stores does suggest the degree of variation between areas as well as between stores.

The cities chosen for this study were selected with a view to the degree of union organization in retail stores, wage rates paid to employees handling meat in retail stores, and provisions contained in collective bargaining agreements between management and labor. These four cities represented wide variations in these factors. The objective of this selection was to determine the importance of wage payments measured in dollars as well as in relation to sales volume and the effect on direct labor costs of such factors as wage rates, contract provisions, and degree of union organization. The data presented in this report thus are designed to represent conditions in the particular stores included in the survey rather than averages based on a city-wide sample.

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1/ The retailer's margin is the difference between the price the retailer pays for the meat and the price he charges the consumer.

## NUMBER, LOCATION, AND CHARACTERISTICS OF STORES SURVEYED

Included in the survey were 46 grocery stores in San Francisco, Calif., Chicago, Ill., Atlanta, Ga., and Columbia, S. C. San Francisco and Chicago represented areas in which all employees engaged in the meat department of retail stores belonged to a local union affiliated with a national union of meatcutters and butchers. In Atlanta, some of the employees were union members. In Columbia, S. C., none of the employees included in the survey at the time it was made in 1956 was a member of a union representing meatcutters and butchers.

Wage rates prevailing in the meat departments of these cities differed markedly. Of the cities where data were obtained, wage rates were highest in San Francisco and Chicago, and lowest in Columbia, S. C. Wage rates prevailing in Atlanta were between these two extremes.

Some variation in wage rates existed among stores within each of the four cities. This variation was greatest in Columbia and in Atlanta. In Chicago and San Francisco, the prevailing union scale represented only a wage floor, and union contracts did not preclude the payment of a higher wage rate than that established in the union contract (table 1).

In still another respect, the conditions affecting direct labor costs were different in the various cities selected for the survey. The provisions in the collective bargaining agreements under which employees worked in the various cities differed. In contrast with working conditions as established by collective bargaining agreements, terms and conditions of employment in stores in Columbia were established by management or custom, there being no written agreement between management and labor.

Included in the survey were stores which differed with respect to the number of paid employees, the hours the store was open, and the estimated annual volume in meat sales as well as in total sales. Six of the stores employed only one full-time person in the meat department. Owners who worked either full-time or part-time in the meat department were not included in the measurement of wage payments and labor costs. The store reporting the greatest number of employees hired 10 full-time employees in the meat department.

A wide variation existed among the cities and, in some instances, among stores within a city with respect to the number of hours the store remained open. The usual practice in San Francisco and Chicago was to operate 54 hours. On the other hand, a few stores in Columbia were operating 68 hours a week or longer.

The stores included in the survey differed in size, as represented by estimated annual meat department sales and estimated sales for the entire store. Estimated meat sales ranged from \$7,800 to \$666,300 a year. Estimated total sales ranged from under \$200,000 to over \$2,500,000 a year.

Both chain and independent grocery stores were included in the survey. Stores providing service, as well as self-service stores, were included.

Table 1.-Range in wages paid full-time employee for 40-hour week, by type of employee and kind of store, selected cities, 1956 1/

		Range in weekly wages paid full-time--2/																
		Meat manager			Head meatcutter			Journeymen			Apprentice			Wrapper			Back-room man	
Location and kind of store		High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	
San Francisco:																		
Chain	2/	---	---	111.40	111.40	101.40	101.40	76.12	76.12	83.00	83.00	---	---	---	---	---		
Independent	3/	---	---	111.40	111.40	113.00	101.40	80.00	80.00	---	---	---	---	---	---	---		
Chicago:																		
Chain	2/	123.85	123.85	106.50	102.00	100.00	95.50	80.00	68.00	---	---	---	---	---	---	---		
Independent	3/	108.60	103.60	106.50	102.00	100.00	95.50	80.00	67.00	---	---	---	---	---	---	---		
Columbia: 3/																		
Chain	2/	92.30	76.92	58.33	58.33	47.92	47.92	41.67	37.50	37.50	31.25	---	---	---	---	---		
Independent	3/	66.66	50.91	58.82	47.27	50.91	32.73	---	---	30.00	20.46	---	---	---	---	---		
Atlanta: 3/																		
Chain 4/	2/	103.33	84.22	88.66	70.00	67.78	37.69	62.00	37.50	53.20	40.40	72.00	72.00	72.00	72.00	72.00		
Independent	3/	112.50	83.33	69.23	69.23	75.00	46.15	56.00	56.00	---	---	60.00	60.00	60.00	60.00	60.00		
4 cities:																		
Chain	2/	123.85	76.92	111.40	58.33	101.40	37.69	80.00	37.50	83.00	31.25	72.00	72.00	72.00	72.00	72.00		
Independent	3/	112.50	50.91	111.40	47.27	113.00	32.73	80.00	56.00	30.00	20.46	60.00	60.00	60.00	60.00	60.00		

1/ In some instances amounts have been estimated to provide for a 40-hour week comparability.

2/ Does not include irregular bonuses or commissions based on yearly sales volume.

3/ Employees in Columbia and Atlanta frequently were not employed under as precise an occupational classification as those in Chicago and San Francisco. Consequently, for purposes of this report, the terminology used for jobs of employees in Columbia and Atlanta has been on the basis of the work performed and the employee's length of service.

4/ One additional kind of job--female meat clerk--\$53.20 for 40-hour week.

Stores were selected from different income areas within each of the cities visited. Some difference in kind of products sold was apparent in stores serving different income groups, and there was, no doubt, a relationship between various products sold, unit prices, and total value of sales. No effort was made to determine the relationship between kind and skill of meat department employees and kinds and cuts of products handled. The attractiveness with which the meat was trimmed was not considered.

#### KINDS OF EMPLOYEES COVERED BY THE SURVEY

Since this survey was confined to the meat department of retail grocery stores, only those jobs directly involved in meat handling and selling at the retail level were covered by the survey. When products other than meat were sold in the meat department, they were included in the sales reported, since separate records generally were not kept. There was no uniformity from store to store with respect to inclusion of fish in the meat department.

When collective bargaining agreements have been entered into by labor and management, some degree of uniformity exists in the job titles and the duties performed by employees holding particular jobs. Although a number of variations exist, the following represent the kind of duties usually performed by particular employees:

Meat department head or head meatcutter -- The department head is in charge of the meat and fish departments in the store. Duties include supervising department personnel, ordering merchandise, serving customers, and operating the department in accordance with the employer's merchandising policy.

J Journeyman -- A skilled butcher who has either served a complete apprenticeship in his trade or has developed equivalent ability by practical experience and is capable of cutting and preparing meat in forms acceptable to the retail trade and in a manner that will yield the maximum of profitable cuts from a carcass. He must also be proficient in waiting on customers and have the knowledge and ability to perform the general detailed tasks in a meat and fish department.

Apprentice -- Individuals employed for the purpose of learning all the details and developing manual skill for performing, after a stated number of years of training, all the duties of journeyman as commonly accepted in the trade.

Back-room man -- A journeyman meatcutter who works 20 hours or more per week in the back room performing part or all of the following duties: Receiving, breaking down the carcasses into primal cuts, trimming, boning, pumping and/or curing meats, making all types of ground meats, taking care of the coolers and back room, and keeping this department in a sanitary condition.

Wrapper -- A person whose duties are confined to weighing, pricing, tagging, wrapping packages, stocking self-service cases, and cleaning up the department.

In stores covered by union agreements, duties performed by various employees complied with the job description and classification as established in the union agreement. In stores which were not covered by union contract provisions, some variation existed between the job title and duties performed. In stores covered by union agreements, persons employed in the meat department did not work in other departments of the store. In a few of the stores having no union agreement, persons from the meat department were employed at times in other departments of the store. Skilled meatcutters were seldom assigned to other sections of the store.

#### EMPLOYMENT PRACTICES OF STORES

In the various stores included in this survey, marked differences were observed in hours of operation, work-scheduling practices, payment of premiums, employment of part-time workers, supplementary wage payments, and fringe benefits.

#### Hours of Operation

Stores visited in the survey reported a wide range in hours of meat department operation (table 2). One store remained open as many as 86 hours during the week. However, most stores remained open 60 hours or less during the week.

Table 2.--Number of hours meat department operated, by city, 1956

Hours meat department: operated a week	Number of stores reporting in--				
	San Francisco	Chicago	Columbia	Atlanta	Total
45 .....	1	0	0	0	1
48 .....	0	0	0	1	1
54 .....	10	11	0	0	21
56 1/2 .....	0	1	0	0	1
60 .....	0	0	0	2	2
62 .....	0	0	1	4	5
62 1/2 .....	0	0	2	4	6
63 .....	0	0	1	0	1
65 .....	0	0	0	1	1
65 1/2 .....	0	0	0	1	1
68 .....	0	0	2	0	2
68 1/2 .....	0	0	1	0	1
69 .....	0	0	1	0	1
72 .....	0	0	1	0	1
86 .....	0	0	1	0	1
Total number of stores reporting ..	11	12	10	13	46

In many instances, the number of hours scheduled for employees in the meat department was different from the hours during which the department was operated. Stores visited during the survey reported from 40 to 65 hours scheduled for employees in the meat department (table 3). This differed from city to city, however. About 72 percent of the employees worked 48 hours a week or less.

Table 3.--Number of hours scheduled for workers in meat department of grocery stores, 1956

Hours in regular workweek	Number of stores reporting in--				
	San Francisco	Chicago	Columbia	Atlanta	Total
	:	:	:	:	:
40 .....	7	6	0	0	13
41 .....	2	0	0	0	2
45 .....	0	0	0	7	7
48 .....	2	5	2	2	11
50 .....	0	0	1	3	4
51 .....	0	0	1	0	1
52 .....	0	0	0	1	1
52 1/2 .....	0	1	0	0	1
55 .....	0	0	4	0	4
57 .....	0	0	1	0	1
65 .....	0	0	1	0	1
.....	.....	.....	.....	.....	.....
Total number of stores reporting ..	11	12	10	13	46

In San Francisco a city ordinance established the opening and closing hours during which fresh meat was sold. Here the meat department in all stores visited was open 9 hours a day every day except Sunday and Monday. Meat departments in all stores visited were closed on Sunday, and the meat department in one store was closed on Monday. Frequently in this city the meat department was operated a different number of hours per week than was the rest of the store.

In Chicago, union contracts provided for payment of a premium for work after 8 hours in 1 day and/or 40 hours in 1 week and provided for no work on Sunday. Allowing an hour for lunch, this accounts for the prevalence of 9 hours for 6 days during the week (table 4).

By contrast, the meat departments of two stores in Atlanta remained open as many as 12 1/2 hours on Friday (table 5). Stores in Columbia also remained open longer on some days of the week, reporting as many as 14 hours on Friday and 15 hours on Saturday (table 6). Various methods of scheduling work were reported as a means of staffing the meat department for these periods.

Table 4.--Number of stores reporting specified number of hours meat department was open, by day of week, Chicago, 1956

Days of the week meat department was open	Number of stores reporting					Total	
	Specified number of hours						
	9	10	10 1/2	11	12		
Monday .....	12	0	0	0	0	12	
Tuesday .....	12	0	0	0	0	12	
Wednesday .....	12	0	0	0	0	12	
Thursday .....	12	0	0	0	0	12	
Friday .....	11	1	0	0	0	12	
Saturday .....	11	0	1	0	0	12	
:	:	:	:	:	:	:	

Table 5.--Number of stores reporting specified number of hours meat department was open, by day of week, Atlanta, 1956

Days of the week meat department was open	Number of stores reporting									Total	
	Specified number of hours										
	3	9	10	10 1/2	11	11 1/2	12	12 1/2	:		
Monday .....	0	1	10	2	0	0	0	0	0	13	
Tuesday .....	0	1	10	2	0	0	0	0	0	13	
Wednesday .....	1	0	10	2	0	0	0	0	0	13	
Thursday .....	0	1	10	2	0	0	0	0	0	13	
Friday .....	0	1	0	0	0	1	9	2	0	13	
Saturday .....	0	1	5	5	2	0	0	0	0	13	
:	:	:	:	:	:	:	:	:	:	:	

Table 6.--Number of stores reporting specified number of hours meat department was open, by day of week, Columbia, 1956

Days of the week meat department was open	Number of stores reporting										Total
	Specified number of hours										
	None	5	10	10 1/2	11	11 1/2	12	12 1/2	13	14	15
Monday ....	0	0	2	1	3	1	2	0	1	0	0
Tuesday ....	0	0	2	1	3	1	2	0	1	0	0
Wednesday ..	0	0	2	1	3	1	2	0	1	0	0
Thursday ..	0	0	2	1	3	1	2	0	1	0	0
Friday ....	0	0	0	1	0	1	5	1	1	1	0
Saturday ..	0	0	0	4	0	0	4	0	1	0	1
Sunday ....	9	1	0	0	0	0	0	0	0	0	10
:	:	:	:	:	:	:	:	:	:	:	:

### Work-Scheduling Practices

When a store manager keeps a department open for a longer time than usually worked by one employee, various methods of scheduling work are used. The most common of these are: (1) Split shift, (2) staggered hours, (3) staggered days, (4) overtime, and (5) part-time work.

A split-shift occurs when an employee's daily working time is not continuous but, rather, split into two or more working periods.

Staggered hours and staggered days are methods of scheduling work by which different employees report for work and leave work at different hours or work on different days. By these methods, the store may be open for a period longer than that which any one employee works.

Overtime work is that performed beyond the regular hours of employment established by union agreement or store practice. Generally, a premium is paid for overtime work, though not always. Premiums were paid for overtime work in all stores which were operating under union agreement as well as in certain others in the survey.

Part-time work consists of employment for fewer hours than would be considered a full or regular workweek. Part-time work may be paid for at rates equal to or less than the rate applying to full-time work.

Staggered days represented the work-scheduling method most commonly used in the stores included in the survey (table 7). Employment of part-time workers was the second most commonly observed practice. There seemed to be little difference between practices of chainstores and independent stores (table 8). However, differences among cities were observed. Stores in San Francisco and Chicago reported overtime as the practice most commonly followed.

Overtime work was reported by 19 stores as a commonly followed practice in scheduling work.

### Payment of Premiums

If premiums are paid, the conditions with respect to their payment differ depending upon any written agreement in effect or the policy of the company. These conditions may differ in regard to the amount of the premium, the period of time after which the premium goes into effect, and the employees to whom premiums are paid. For example, in San Francisco payment of a premium went into effect in all stores for all work in excess of 40 hours during 1 week; by contrast, in Columbia only 2 of the 10 stores reported paying a premium for overtime work and this premium payment went into effect for work in excess of 48 hours in 1 week (table 9).

Head meatcutters and journeymen were the kinds of employees most frequently reported to have worked overtime during the week selected for the survey (table 10).

Table 7.--Number of stores reporting specified employment practices in meat department, by city, 1956

Employment practice	Number of stores reporting in--				
	San	Chicago	Columbia	Atlanta	4 cities
	Francisco	:	:	:	:
Split shift .....	0	0	0	1	1
Staggered hours .....	4	0	4	4	12
Staggered days .....	6	3	10	11	30
Overtime .....	10	8	0	1	19
Part-time work .....	6	7	6	1	20
Regular hours only .....	0	1	0	2	3
Total number of stores reporting <u>1/</u> .....	11	12	10	13	46

1/ Stores reported more than one practice.

Table 8.--Number of stores reporting specified employment practices in meat department, by kind of store, 1956

Employment practice	Number of stores reporting		
	Chain	Independent	Total
	:	:	:
Split shift .....	0	1	1
Staggered hours .....	6	6	12
Staggered days .....	15	15	30
Overtime .....	9	10	19
Part-time work .....	8	12	20
Regular hours only .....	0	3	3
Total number of stores reporting <u>1/</u> .....	18	28	46

1/ Stores reported more than one practice.

In addition to premium payments for overtime work, union contracts and, sometimes, individual store practices provide for the payment of a premium under certain other circumstances. Examples of this are payment for the sixth consecutive day as such, or payment for Sundays or holidays as such. Premiums for these days go into effect regardless of the number of hours which the employee may have worked during the week (table 11).

Table 9.--Premium pay practices for overtime work in retail grocery stores, by city, 1956

Location	Number of stores reporting					Total	
	No premium paid	Premium paid after					
		40 hours	45 hours	48 hours			
San Francisco .....	0	11	0	0		11	
Atlanta .....	6	3	4	0		13	
Chicago .....	0	12	0	0		12	
Columbia .....	8	0	0	2		10	
4 cities .....	14	26	4	2		46	

Table 10.--Number of stores paying overtime during selected week, by kind of worker and by city, 1956

Kind of worker	Number of stores reporting in--				
	San Francisco	Chicago	Columbia	Atlanta	4 cities
		:	:	:	:
Meat manager .....	0	3	0	0	3
Head meatcutter .....	4	5	0	3	12
Journeyman .....	5	5	0	5	15
Apprentice .....	0	1	0	3	4
Wrapper .....	0	---	0	0	0
Back-room man .....	0	---	0	0	0
Total number of stores reporting 1/ .....	11	12	10	13	46

1/ Not all stores reported paying overtime during selected week and some stores paid overtime to more than one kind of worker.

#### Part-Time Work

During the week selected for survey purposes, 19 stores reported employing part-time employees. Of these, the kind of worker most frequently hired was a journeyman (table 12).

Table 11.--Number of stores reporting specific premium pay practices, selected cities, 1956

Pay practice	Number of stores reporting in--				
	San Francisco	Chicago	Columbia	Atlanta	4 cities
Premium pay for work:					
After specified number of hours .....	11	12	2	8	33
On the sixth consecutive day as such .....	11	12	0	0	23
On the seventh consecutive day as such .....	11	0	0	0	11
On Sunday as such .....	11	0	0	0	11
On holidays as such .....	11	0	0	0	11
Total number of stores reporting 1/ .....	11	12	10	13	46

1/ Stores reported more than one practice.

Table 12.--Number of stores hiring part-time workers during selected week, by kind of worker and by city, 1956

Kind of worker	Number of stores reporting in--				
	San Francisco	Chicago	Columbia	Atlanta	4 cities
J Journeyman .....	1	5	4	3	13
Apprentice .....	1	1	0	2	4
Wrapper .....	2	---	0	0	2
Total number of stores reporting 1/ .....	11	12	10	13	46

1/ Not all stores hired part-time workers during survey week.

#### Supplementary Wage Payments

Supplementary wage payments were reported by 14 of the 46 stores included in the survey (table 13). The most common type of payment was a commission or bonus to the meat manager or head meatcutter based on volume of weekly sales. In some stores, journeymen meatcutters also received bonuses. Bonuses or

commissions usually took the form of a fixed dollar amount if total department sales exceeded a quota. Bonuses or commissions also were paid as Christmas bonuses based on volume of sales during the year.

Supplementary wage payments to meat handlers in retail stores are a matter of management decision, rarely being subjects for collective bargaining between unions and management.

Table 13.--Number of stores reporting supplementary wage payments, by city, 1956

Location	Number of stores	
	Reporting supplementary	Total
	wage payments	
Atlanta .....	7	13
Columbia .....	0	10
San Francisco .....	3	11
Chicago .....	4	12
4 cities .....	14	46

#### Other Fringe Benefits

In addition to supplementary wage payments, other fringe benefits were reported by some stores included in the survey. The most common of these were: Paid vacations; paid holidays; paid sick leave; payments, in part at least, by the store for pensions, hospitalization, and medical care; and the provision of uniforms (table 14).

The stores provided uniforms for all workers in all the meat departments visited. Paid vacations and paid holidays were reported in about 96 percent of the stores.

Over 40 percent of the stores paid, at least in part, for hospitalization, medical care, and sick leave; however, these fringe benefits varied in different areas of the country. These kinds of benefits were more common in San Francisco than they were in Chicago, for example, although unions represented the workers in all stores visited in both areas. Frequently, in independent nonunion stores, informal plans between the store owner and workers existed. Under this kind of agreement, owners said they continued the pay of a sick employee for "a reasonable time." Informal plans have not been included in the tabulation presented because each instance represents an isolated case which does not permit a description of the regular employment practice.

Table 14.--Number of stores reporting formalized employer-contributed fringe benefit plans, by city, 1956

Selected fringe benefit	Number of stores reporting in--				
	San	Chicago	Columbia	Atlanta	4 cities
	Francisco				
	:	:	:	:	:
Paid vacations .....	11	12	9	13	45
Paid holidays .....	11	12	8	13	44
Pensions .....	4	3	2	4	13
Hospitalization .....	11	2	5	7	25
Medical care .....	11	1	3	6	21
Paid sick leave .....	11	1	1/ 3	1/ 5	20
Uniforms provided .....	11	12	10	13	46
Total number of stores reporting 2/ .....	11	12	10	13	46

1/ Informal plans have not been included.

2/ Stores reported more than one kind of plan.

Payment by management for pensions was the type of fringe benefit least frequently found in the stores visited. About 28 percent of the stores visited reported some kind of payment for pensions.

With the exception of payments, at least in part, by management for medical care, little difference was observed between the practices of union stores and nonunion stores in the payment of particular kinds of fringe benefits (table 15). However, a marked difference was observed in fringe benefits in the San Francisco area, as contrasted with the other three areas.

Because of the wide variations in practices within the four areas, no attempt was made to assess the cost of the fringe benefits mentioned. Wide differences can exist between stores even though the stores follow the same general policy. For example, a store may provide for paid vacations, but the effect of this benefit on costs may vary, depending on whether the benefit applies to all employees or to particular employees, the length of time an employee must work before the plan applies to him, and the length of the vacation, which may vary from 1 week to 3 weeks. Similarly, costs for paid sick leave and payments to funds for hospitalization and medical care, or for insurance to cover these items, depend upon what employees are covered and when and how long the provisions apply.

#### Legally Required Payments

Data on payments made by management in the form of taxes for social security, unemployment compensation, and workmen's compensation were not obtained

Table 15.--Number and percentage of stores reporting formalized fringe benefit plans, union and nonunion stores, 1956 1/

Fringe benefits	Number of stores reporting			Percentage of stores reporting		
	Union organized	Nonunion	Total	Union organized	Nonunion	Total
	Number	Number	Number	Percent	Percent	Percent
Paid vacations ...:	27	18	45	100	95	98
Paid holidays ....:	27	17	44	100	89	96
Pensions .......	8	5	13	30	26	28
Hospitalization .:	15	10	25	56	53	54
Medical care ....:	14	7	21	52	37	46
Paid sick leave .:	12	8	20	44	42	43
Uniforms provided:	27	19	46	100	100	100
Total stores reporting 2/ .:	27	19	46	100	100	100

1/ Only employer-contributed plans have been included.

2/ Stores reported more than one kind of plan.

in this survey and, consequently, are not included in the wage bill. However, deductions which were made from employees' earnings for social security are included.

Laws in effect in 1956 provided for payments by management in the form of social security taxes--as contrasted with those deducted from the employees' wages--which amounted to 2 percent of the first \$4,200 annual wages.

Unemployment compensation taxes vary from company to company and from year to year depending upon the number of employees who became unemployed in a past period, usually a year or two.

Workmen's compensation is paid for by employers and, like unemployment compensation taxes, varies widely from company to company, depending on accident records and method of obtaining insurance. The kinds of legal requirements also vary among States. For example, in South Carolina employers of less than 15 employees are not required to provide compensation of work injuries. In Georgia, employers having fewer than 10 employees are exempt, whereas in California and Illinois no number-of-employee exemptions were provided. 2/

2/ Laws in effect in 1956.

### WAGE BILL

The wage bill is the direct wage payment for a defined period. It is determined by the number of employees hired, the wage rates paid, and the number of hours worked. The term "wage bill" is used in this report because it is more precise than "labor cost." Wages paid for a particular period of time can be determined and compared with wages paid in another place for the same period of time. On the other hand, the concept of cost includes additional items. For example, if an employer pays for vacations, his cost is different from that of an employer who does not, because the first employer is paying for time not worked. If all employees in a store get 3-week vacations, the cost is different from that in a store in which all employees get 1-week vacations. In addition, if employees get a 1-week vacation after 1 year, costs differ from those in stores where employees do not get a vacation until they have worked 5 years. Vacations represent only one item of cost. Other items which vary markedly are payments to health and welfare funds, various insurance programs, and even State benefits. Each cost represents an entire area for exploration. It has been estimated that the cost of fringe benefit payments is about 20 percent of the wage bill in retail industries. 3/ Because of wide variations among stores in provisions of this nature, most of the analysis in this report has been confined to the wage bill.

Retailing requires that employees be available to serve the anticipated number of customers. The flow of customers through a store is very irregular compared with the flow of products through a production line. Consequently, the number of retail personnel handling a certain dollar output of sales may represent a different relationship from that of manufacturing personnel handling a certain dollar volume of production.

In addition, if there are no contract provisions to the contrary, management may staff the retail meat department in various ways. For example, 18 of the 46 stores visited had a paid manager for the meat department; in the remaining 28 stores, there was no meat manager, as such. In some instances, the store owner filled this capacity; in others, the head meatcutter performed virtually the same duties as a meat manager. Twenty-four stores reported having a head meatcutter. Journeymen, or "butchers" as these employees were called in some areas, were hired in 38 stores. On the other hand, a few stores operated with only a head meatcutter and an apprentice. Only one store reported a "back-room man," as such. One aspect in which union stores differ from nonunion stores is the detail of job description necessitated by the union contract. Since union stores have more detailed job descriptions, it is possible that similar functions are performed in nonunion stores without similar job titles. It is, therefore, possible that in some stores in which there was no union agreement an employee may have been working as a back-room man although he did not have

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3/ U. S. Chamber of Commerce. The definition of fringe benefits to which this applies includes in this amount the payment for time not worked--e.g., vacations--and premium pay for overtime, as well as legally required payments.

this job title. Only 8 stores reported hiring wrappers (table 16). This is partly due to the preponderance in the survey of stores providing service, as contrasted with self-service stores.

Table 16.--Estimated percentage distribution of total wage bills of 46 stores, by kinds of employees, 1956

Percentage of wage bill	Stores reporting							
	Meat manager	Head meat cutter	Journey- man	Back- room man	Apprentice	Wrapper	meat clerk	
	Number	Number	Number	Number	Number	Number	Number	
	:	:	:	:	:	:	:	
0 to 10 percent ....:	0	0	0	0	2	0	0	
11 to 20 percent ....:	3	7	2	0	7	2	0	
21 to 30 percent ....:	4	8	3	1	3	2	1	
31 to 40 percent ....:	6	6	3	0	0	2	0	
41 to 50 percent ....:	2	1	3	0	3	2	0	
51 to 60 percent ....:	1	1	6	0	0	0	0	
61 to 70 percent ....:	1	0	4	0	1	0	0	
71 to 80 percent ....:	0	0	4	0	0	0	0	
81 to 90 percent ....:	0	0	1	0	0	0	0	
91 to 100 percent ....:	1	1	11	0	1	0	0	
Total stores reporting specified jobs ...:	18	24	38	1	17	8	1	

Wage rates for skilled or experienced employees generally are higher than rates for employees with less skill or experience. Thus, the total wage bill for a meat department staffed with inexperienced employees usually will be less than the bill for a department staffed with workers who are more experienced. It cannot be overlooked, however, that the appearance of skillfully cut meat is one of the most important aspects of meat retailing, and may be an important factor in the net income of the meat department.

The wage bill increases as man-hours worked increase; however, the rate of increase may be affected by the decision to employ more persons or to employ the same number of persons longer hours, in some instances at overtime rates. In addition, there is a direct relationship between the level of wages paid and the total wage bill. On a man-hour basis, the wage bill was markedly higher in stores in San Francisco and Chicago than in stores in Columbia and Atlanta. 4/

4/ An analysis of variance among cities of the wage bill per man-hour showed a significant difference at the 1-percent level.

The total wage bill per man-hour for each store is shown in table 17. In addition, the average wage bill per man-hour for the stores surveyed in each city was computed on the basis of the information provided by the stores. The wage bill per man-hour reflects the difference in wages paid in each of the cities and reflects, also, the difference in staffing from store to store.

Man-hours and pay for the owner who may have worked part-time or full-time in the meat department have not been included. No satisfactory basis was determined for allocating time the owner spent in the meat department or of determining the payment he earned for such time. The exclusion of owner's time and earnings has a greater effect on sales-cost relationships in smaller, independently owned stores than in large chainstores. However, it is also apparent that store owners who spend some of their time on operations of the meat department of their store perform certain entrepreneurial functions, such as pricing meat from alternative sources of supply, which are not performed by anyone in many individual stores under chain management.

Table 17.--Wage bill per man-hour for employees in meat department of grocery stores, 4 cities, 1956

Store	Wage bill per man-hour in--			
	San	Chicago	Columbia	Atlanta
	Francisco	Chicago	Columbia	Atlanta
	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
1 .....	2.34	2.24	0.82	1.40
2 .....	2.38	2.30	.99	1.45
3 .....	2.45	2.38	1.03	1.50
4 .....	2.53	2.39	1.08	1.53
5 .....	2.54	2.41	1.10	1.56
6 .....	2.57	2.42	1.14	1.56
7 .....	2.67	2.43	1.16	1.59
8 .....	2.69	2.46	1.19	1.61
9 .....	2.72	2.51	1.24	1.64
10 .....	2.75	2.55	1.27	1.65
11 .....	2.82	2.57	---	1.67
12 .....	---	2.66	---	1.76
13 .....	---	---	---	1.78
Average .....	2.58	2.44	1.10	1.59

#### WAGE BILL IN RELATION TO SALES

The relationship between the wage bill for a specific period and output or sales for this same period is much more important than the measurement of the wage bill alone. This relationship represents input-output expressed in money terms, which to some extent determines profitability of an operation and partially measures its efficiency.

In this survey, the value of meat sales for a week were used as a measure of output. Reliable measures of the quantity of meat sold during the week were not available from many of the stores visited. In addition, no attempt was made to determine the quantity of meat sold at various prices nor the time required for a skilled meatcutter to produce particular cuts of meat. However, stores serving different income groups and stores selling a wide variety of meat products were included in the survey.

#### WAGE BILL AS A PERCENTAGE OF SALES

The median wage bill, measured as a percentage of sales for all stores included in the survey, was 8.6. For stores visited in the San Francisco area the median was 10.9, for stores in Chicago 10.1, in Columbia 6.3, and in Atlanta 7.4 percent of sales (table 18). However, the wage bill shown as a percentage of sales varied considerably among stores in each city. In the San Francisco area the percentage ranged from 7.4 to 14.9, in Chicago from 5.4 to 16.5, in Columbia 5.6 to 43.3, and in Atlanta 4.1 to 10.6 percent (fig. 1).

Over 90 percent of all the stores visited had a wage bill of less than 13 percent of sales. Stores visited in the San Francisco area were an exception here, 82 percent of all stores visited had a wage bill of less than 13 percent of sales.

#### FACTORS AFFECTING THE RELATIONSHIP BETWEEN WAGE BILL AND SALES

Many factors affect the percentage wages are of sales. These factors can be summarized under two headings: (1) Institutional factors and (2) productivity of workers. These factors are interrelated in that institutional factors affect the productivity of workers; on the other hand, working methods may be of such importance in influencing efficient operation and consequent productivity that they outweigh any institutional factors affecting the conditions under which selling is performed.

As has been pointed out, some of the variables affecting the wage bill in relation to sales have not been investigated completely, primarily because of the problem of measurement involved. It is fairly clear, however, that these unmeasured variables may, at least partially, offset one another. Thus, the wage bill of a few of the smaller stores may be moderately understated because the time spent by owners in performing jobs in the meat department is not

included. On the other hand, the wage bill in smaller stores may tend to be overstated because these stores may perform more functions in connection with the retailing of meat than do larger stores.

Table 18.--Wage bill for direct labor shown as a percentage of sales, by city, 1956

Percentage of sales	Stores reporting in--				
	San Francisco	Chicago	Columbia	Atlanta	4 cities
	Number	Number	Number	Number	Number
	:	:	:	:	:
Under 5.0 percent .....	0	0	0	1	1
5.0 to 5.9 percent ....	0	1	3	2	6
6.0 to 6.9 percent ....	0	0	3	2	5
7.0 to 7.9 percent ....	2	2	1	4	9
8.0 to 8.9 percent ....	1	1	0	1	3
9.0 to 9.9 percent ....	2	2	1	1	6
10.0 to 10.9 percent ....	1	2	0	1	4
11.0 to 11.9 percent ....	0	2	1	0	3
12.0 to 12.9 percent ....	3	1	0	0	4
13.0 to 13.9 percent ....	1	0	0	0	1
14.0 to 14.9 percent ....	1	0	0	0	1
15.0 percent and over ...	0	1	1	0	2
Total number of stores reporting 1/ .....	11	12	10	12	45
	Percent	Percent	Percent	Percent	Percent
Median .....	10.9	10.1	6.3	7.4	8.6
Mean .....	11.0	10.1	10.7	7.3	9.7

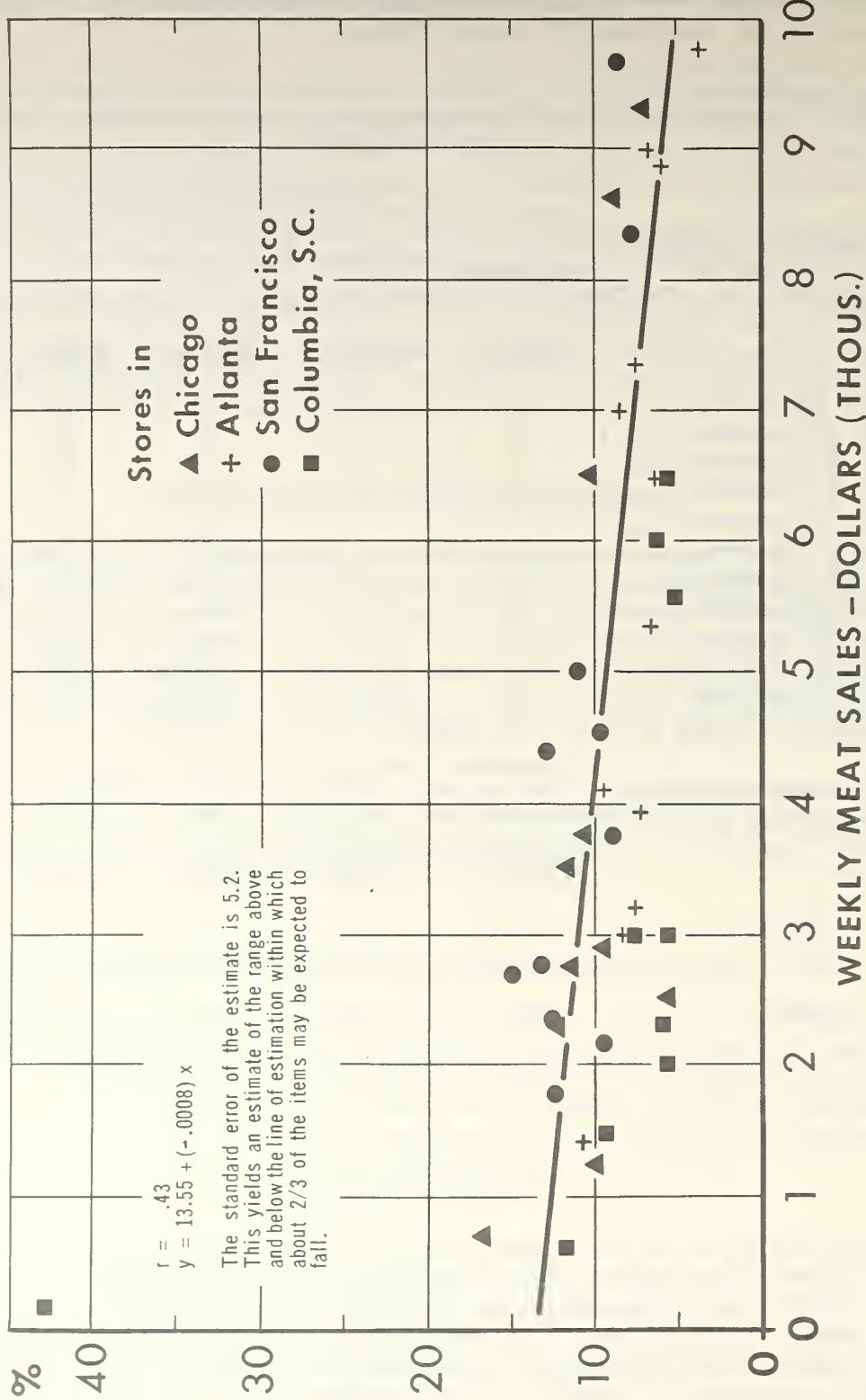
1/ One store did not provide sales data.

#### Institutional Factors

Stores included in the survey were of different size in terms of sales volume. Some of the stores were units of a chain organization, as contrasted with independently owned and operated stores. Self-service was used as a selling method in 15 of the 46 stores visited. As described earlier, some stores employed workers who were union members, and these workers were represented by the union in bargaining with management over terms and conditions of work.

In Stores in Four Cities for 1 Week in 1956

## WAGE BILL AS A PERCENTAGE OF SALES



U. S. DEPARTMENT OF AGRICULTURE

NEG. 4368-57(7) AGRICULTURAL MARKETING SERVICE

Figure 1

### Ownership of Stores

Of the 45 stores reporting sales, 18 were units of a chain organization and 27 were independently owned and operated. In both instances, only employees hired in the meat department of the retail store were included in this analysis. Operations which might have been performed at a distribution center owned by a chain which serviced its member stores were not included.

In contrast with the median percentage of the wage bill to meat sales of 8.6 for all stores included in the survey, the median percentage for chainstores was 7.5 and for independent stores 9.6 percent (table 19). This relationship appeared to be a function of sales volume rather than ownership, however. Estimated annual meat sales of the chainstores included in the survey averaged about \$351,000, compared with \$163,400 for independent stores (table 20).

### Union Organization

Of the 45 stores that reported both their sales and their weekly wage bill, 27 were stores which had a collective bargaining agreement between a labor union, representing the workers, and the owner of the store.

When such an agreement is in effect, the wages to be paid workers are a matter of bargaining, the result of which is the establishment of a wage rate for a particular kind of job. While the wage rates established under union-management contracts frequently determine the exact wage rates paid, in some instances the wage rate actually may exceed that specified in the contract. The rate established by the contract remains in effect for the particular job usually for a year, at which time the union-management contract may be "opened" for the establishment of a new wage rate for one or more jobs covered by the contract. Apart from this opening of the contract for the establishment of new wage rates, an employee may obtain a higher wage by being promoted from a job bearing one rate to a job carrying a higher wage rate--for example, promotion from apprentice to journeyman.

In addition, as mentioned earlier, union contracts generally provide for the payment of a premium for work beyond an established number of hours during the week, an established number of hours during the day, or for certain days as such, as well as for other terms and conditions of employment.

In stores in which the workers are not covered by union-management contracts, management sets a policy which workers follow, or the owner or manager of the store and the employee agree upon the pay the employee will receive for a regular period of time and for overtime.

When operating under a collective bargaining agreement, a wage scale and a method of operation are established which will prevail for the duration of the contract. In the absence of a collective bargaining agreement, any feature of one or more workers' wage payments or methods of work can be changed when the owner determines.

Table 19.---Wage bill for direct labor shown as a percentage of sales, chainstores and independents, by city, 1956

Wage bill as percentage of sales	Stores reporting in--				Atlanta				4 cities			
	San Francisco	Chicago	Columbia	Inde- pendent	Chain	Inde- pendent	Chain	Inde- pendent	Chain	Inde- pendent	Chain	Inde- pendent
	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
Under 5.0 percent .....	0	0	0	0	0	0	1	0	1	0	1	0
5.0 to 5.9 percent .....	0	0	0	1	1	2	2	0	3	0	3	3
6.0 to 6.9 percent .....	0	0	0	0	1	2	2	0	3	0	3	2
7.0 to 7.9 percent .....	2	0	2	0	0	1	2	2	2	6	6	3
8.0 to 8.9 percent .....	1	0	1	0	0	0	0	0	1	2	2	1
9.0 to 9.9 percent .....	0	.2	0	2	0	1	0	1	0	1	0	6
10.0 to 10.9 percent .....	0	1	1	0	0	0	0	0	1	1	1	3
11.0 to 11.9 percent .....	0	0	2	0	1	0	0	0	0	0	0	3
12.0 to 12.9 percent .....	1	1	0	1	0	0	0	0	0	0	1	2
13.0 to 13.9 percent .....	1	1	0	0	0	0	0	0	0	0	1	1
14.0 to 14.9 percent .....	0	1	0	0	0	0	0	0	0	0	0	1
15.0 percent and over ...	0	0	1	0	1	0	1	0	0	0	0	2
Total number of stores reporting ...	5	6	4	8	2	8	7	5	18	27		
Median .....	12.6	9.2	7.3	11.0	10.4	6.1	6.5	8.4	7.5	9.6		
Mean .....	12.4	9.7	7.2	11.5	10.4	10.8	6.3	8.7	8.2	10.7		

Table 20.--Wage bill for direct labor shown as a percentage of meat sales, by yearly dollar volume of sales and by ownership of stores, 1956

Volume of sales and kind of stores	Stores reporting percentages--											
	Under 5.0	5.0-6.0	6.0-7.0	7.0-8.0	8.0-9.0	9.0-10.0	10.0-11.0	11.0-12.0	12.0-13.0	13.0-14.0	14.0-15.0	Total
Under \$100,000:												
All stores	0	0	0	0	2	1	1	0	0	0	2	7
Chain	0	0	0	0	0	0	0	1	0	0	0	1
Independent	0	0	0	0	2	1	1	0	0	0	2	6
\$100,000 to \$199,999:												
All stores	0	3	1	3	1	2	1	2	2	1	0	17
Chain	0	0	1	1	0	1	0	0	0	0	0	3
Independent	0	3	1	2	0	2	0	2	1	1	0	14
\$200,000 to \$399,999:												
All stores	0	2	3	2	1	2	2	0	1	0	0	13
Chain	0	2	2	1	0	0	0	1	0	0	0	6
Independent	0	0	1	1	1	2	2	0	0	0	0	7
\$400,000 and over:												
All stores	1	1	1	4	1	0	0	0	0	0	0	8
Chain	1	1	1	4	1	0	0	0	0	0	0	8
Independent	0	0	0	0	0	0	0	0	0	0	0	0
Total:												
All stores 1/	1	6	5	9	3	6	4	3	4	1	2	45
Chain	1	3	3	6	2	0	1	0	2	0	0	18
Independent	0	3	2	3	1	6	3	3	2	1	1	27

1/ One store did not report sales data.

It is not altogether possible to evaluate the effect, if any, of union organization on cost of operation. In this analysis, an observation was made of the percentage of sales represented by the wage bill for direct labor in union stores, in nonunion stores, and in both groups. The median percentage for all stores included in the survey was 8.6. For union stores, the median was 9.8; for nonunion stores, the median was 7.1 (table 21). 5/ These variations between all union and all nonunion stores would seem to be of less significance than the variations among stores in different cities. For example, in San Francisco the median percentage was 10.9 and in Chicago, 10.1, whereas in union stores in Atlanta the median was 7.0 (table 22). All stores in San Francisco and Chicago were union stores. In Atlanta, however, part of the stores were union organized and part were not. In union stores in Atlanta the median percentage of wage bill for direct labor to sales was 7.0; in nonunion stores the percentage was 7.5 (table 23). It would seem, therefore, that unionization as such does not explain the variation; however, the degree to which union organization affects all wage scales in a locality, as well as many other influences establishing wage levels, may be important. Other factors which may be of great importance in that they establish wage levels in an area have not been considered. They include: Supply of and demand for labor in the locality, alternative employment opportunities, cost of living, and degree of labor mobility.

When the percentage of sales represented by the wage bill was compared in stores in different cities, an analysis of variance indicated there was no statistically significant difference among cities. As previously pointed out, there was a significant difference in wages paid among cities, but not in the wage bill shown as a percentage of sales. For example, whereas the wage bill per man-hour in stores in San Francisco averaged \$2.58, as contrasted with \$1.10 in Columbia, the median percentage of sales represented by the wage bill in stores in San Francisco was 10.9 and in Columbia 6.3--a difference, but not one large enough to be statistically significant at the 1-percent level. This test indicates, therefore, that statistically the difference in percentage of sales represented by the wage bill differs as much from one store to another within a city as it does among cities, although it is important to keep in mind that there were differences in the characteristics of the stores surveyed in each city. The extent of the range in ratios among the several stores in each city was as follows: San Francisco 7.4 to 14.9; Chicago 5.4 to 16.5, Columbia 5.6 to 43.3, and Atlanta 4.1 to 10.6. No doubt, the lower volume of sales per man-hour, generally in stores in Atlanta and Columbia, was directly related to such factors as number of hours stores were open and total volume of sales.

#### Scale of Operation

Stores included in the survey reported estimated yearly sales for the entire store ranging from less than \$200,000 to \$2,500,000. About three-fourths of the stores reported yearly sales of less than \$1,000,000. These 32 stores

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5/ With the number of observations made and the variance found, this difference was not large enough to be statistically significant at the 1-percent level.

Table 21.--Wage bill for direct labor shown as a percentage of sales, by organization, 1956

Wage bill as percentage of sales	Stores reporting			Total
	Union	Nonunion		
	Number	Number	Number	
Under 5.0 percent .....	0	1		1
5.0 to 5.9 percent ....	2	4		6
6.0 to 6.9 percent ....	1	4		5
7.0 to 7.9 percent ....	6	3		9
8.0 to 8.9 percent ....	2	1		3
9.0 to 9.9 percent ....	4	2		6
10.0 to 10.9 percent ....	3	1		4
11.0 to 11.9 percent ....	2	1		3
12.0 to 12.9 percent ....	4	0		4
13.0 to 13.9 percent ....	1	0		1
14.0 to 14.9 percent ....	1	0		1
15.0 percent and over ....	1	1		2
Total number of stores reporting 1/ ....	27	18		45
	Percent	Percent	Percent	
Median .....	9.8	7.1		8.6
Mean .....	9.9	9.3		9.7

1/ One store did not provide sales data.

had meat department wage bills which amounted to from 5.0 to over 15 percent of meat sales (table 24). Stores having wage bills of 14 percent of sales or more were stores with total sales of less than \$500,000 a year. The 11 stores reporting estimated total sales of \$1,000,000 and more had wage bills of less than 5 percent to 10.9 percent of sales.

Sales for the meat department only ranged from less than \$50,000 to over \$500,000. The median was about \$196,000 (table 25). For stores reporting estimated yearly sales of less than \$100,000, the median wage bill shown as a percentage of sales was 12.4 percent; for stores reporting estimated sales of \$100,000 to \$199,999, the median percentage was 9.4; for stores reporting sales of \$200,000 to \$399,999, the median percentage was 7.5; and for stores reporting estimated sales of \$400,000 and over, the median percentage was 7.3. The declining ratio of wage bill to sales reflected economies of scale. 6/

6/ An analysis of variance among stores having different sales volume indicated there was a significant difference at the 1-percent level. For more information dealing with volume of sales, see "Costs of Retailing Meats in Relation to Volume," by Edmund Farstad and V. John Brensike, U. S. Dept. Agr., Mktg. Res. Rept. 24, 25 pp., illus. 1952.

Table 22.--Wage bill for direct labor shown as a percentage of sales in union stores, by city, 1956

Location	Stores reporting percentages--												Total and over:
	5.0-	6.0-	7.0-	8.0-	9.0-	10.0-	11.0-	12.0-	13.0-	14.0-			
	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.0			
San Francisco .....	0	0	2	1	2	1	0	3	1	1	11		
Chicago .....	1	0	2	1	2	2	2	1	0	1	12		
Atlanta .....	1	1	2	0	0	0	0	0	0	0	4		
Total number of stores reporting	2	1	6	2	4	3	2	4	1	2	27		

Table 23.--Wage bill for direct labor shown as a percentage of sales in nonunion stores, by city, 1956

Location	Stores reporting percentages--												Total and over:
	Under	5.0-	6.0-	7.0-	8.0-	9.0-	10.0-	11.0-	12.0-				
	5.0	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.0				
Columbia .....	0	3	3	1	0	1	0	1	1	10			
Atlanta .....	1	1	1	2	1	1	1	0	0	8			
Total number of stores reporting	1	4	4	3	1	2	1	1	1	18			

The variation in dollar volume of sales was more important than the wage rates prevailing in the various cities in determining the relationship between the wage bill and sales (fig. 1). Frequently, when the sales volume was small, even low wage rates resulted in a wage bill showing a high percentage of sales. Conversely, owing to a large sales volume, some stores had a wage bill which represented a small percentage of sales even though high wage rates were paid.

To the extent that union contracts established employment practices which resulted in wages that were in the nature of a fixed cost, a large sales volume was required to obtain a proportionately small ratio of wages to sales.

Table 24.--Wage bill for direct labor shown as a percentage of meat sales, by size of store, 1956

Estimated yearly sales in grocery store										Stores reporting percentages--			
	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>									
Under \$200,000	0	1	0	0	0	0	1	0	0	0	0	1	3
\$200,000 to \$499,999	0	2	2	3	4	1	1	3	0	1	1	1	18
\$500,000 to \$999,999	0	1	2	2	1	2	1	1	0	0	0	0	11
\$1,000,000 to \$1,499,999	0	1	1	0	1	0	1	0	0	0	0	0	4
\$1,500,000 to \$1,999,999	1	1	0	3	1	0	0	0	0	0	0	0	6
\$2,000,000 to \$2,499,999	0	0	1	0	0	0	0	0	0	0	0	0	1
Total number of stores reporting 1/ .....	1	6	5	9	3	5	4	3	4	0	1	2	43

1/ Three stores did not provide total sales data.

Table 25.--Wage bill for direct labor shown as a percentage of meat sales, by yearly sales, 1956

Estimated value of meat sales										Stores reporting percentages--			
	<u>No.</u>	<u>No.</u>	<u>No.</u>	<u>No.</u>									
Under \$100,000	0	0	0	0	2	1	1	1	0	0	0	2	7
\$100,000 to \$199,999	0	3	1	3	1	2	2	2	1	1	0	17	
\$200,000 to \$399,999	0	2	3	2	1	2	0	1	0	0	0	0	13
\$400,000 and over .....	1	1	1	4	1	0	0	0	0	0	0	0	8
Total number of stores reporting 1/ .....	1	6	5	9	3	6	4	3	4	1	1	2	45

1/ One store did not provide sales data.

Productivity of Workers

Output for a retailing operation can be shown in quantity of products handled or in terms of dollar sales. In this survey, respondents were questioned about total meat sales for the week selected for study. Some respondents reported sales both in dollars and pounds. However, the dollar figures were considered to be more reliable. No precise records of pounds of meat sold were kept by the stores included in the survey; pounds of meat purchased were used in estimating sales, although these figures were limited because of inadequate inventory data and the fact that only 23 stores were able to estimate quantities purchased. For these reasons, primary emphasis was given in the analysis to meat sales in dollar terms. <sup>7/</sup> Table 26 gives estimates of the dollar meat sales per employee man-hour for each of the stores surveyed.

Table 26.--Meat sales per man-hour, 4 cities, 1956 <sup>1/</sup>

Store <sup>2/</sup>	Meat sales per man-hour in--			
	San	Chicago	Columbia	Atlanta
	Francisco	Chicago	Columbia	Atlanta
1 .....	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>	<u>Dollars</u>
1 .....	16.86	14.58	2.63	14.10
2 .....	19.44	20.54	8.96	16.19
3 .....	20.37	21.48	10.91	20.00
4 .....	20.66	23.02	15.46	20.83
5 .....	21.83	23.03	15.80	21.24
6 .....	25.00	23.21	16.30	21.88
7 .....	26.09	26.04	18.40	21.94
8 .....	26.85	26.64	19.61	24.48
9 .....	30.68	26.70	19.69	24.60
10 .....	31.38	31.44	22.14	25.55
11 .....	31.40	31.72	---	26.52
12 .....	---	44.64	---	43.78
Average of all stores ...	24.60	26.09	14.99	23.43

<sup>1/</sup> Only man-hours of paid employees were included; owner's time was not included.

<sup>2/</sup> One store did not provide meat sales data.

<sup>7/</sup> For more information relating to the relationship between volume of meat sales measured in pounds and costs, see "Costs of Retailing Meats in Relation to Volume," by Edmund Farstad and V. John Brensike, U. S. Dept. Agr., Mktg. Res. Rept. 24, 25 pp., illus. 1952.

Services performed in connection with meat sales varied from store to store because of such factors as form in which meat was received, extent to which cutting was done at customer's request, and types and varieties of meat sold. Information was obtained, for example, showing that 20 of the 46 stores in the sample received meat in both carcass and primal cut. Fourteen stores received carcasses, which were broken into primal cuts in the store where sold, and 12 received their meat at the store already separated into primal cuts--a practice which was reported more frequently by chainstores. Allowance was not made for these variations among the different stores in the sample in computing the wage bill.

There was a marked difference among stores within each city with respect to sales per man-hour. The greatest variation within cities was observed in Chicago, followed by Atlanta, Columbia, and San Francisco. 8/

#### Number of Workers

The number of workers alone does not determine the percentage of sales represented by the wage bill for direct labor (table 27). Two stores with only one hired employee each had a ratio of 15 percent and over. On the other hand, stores with 8 or 10 employees showed ratios of wage bill to sales of less than 9 percent.

#### Hours Operated

There does not seem to be a relationship between the weekly hours operated and the percentage of sales represented by the wage bill (table 28).

Some of the stores operating 68 or more hours per week showed ratios of 10 or less. On the other hand, stores operating 54 hours a week had ratios of from 5 to over 15 percent. Of course, it should be pointed out that these stores were not all following the same policies in the payment of overtime, the amount of overtime paid, or the time when it became effective.

Overtime payments constituted nearly 25 percent of the wage bill in two stores visited. On the other hand, 54 percent of the stores included in the survey paid no overtime during the week selected for analysis. In 46 percent of the stores overtime constituted from 1 to 25 percent of the wage bill (table 29).

---

8/ An analysis of variance between cities indicated that the variance between cities of meat sales per man-hour was statistically significant at the 1-percent level.

Table 27.--Relationship between number of employees hired in meat department and wage bill shown as a percentage of sales, 1956

Stores reporting percentages--										
Number of full-time employees in meat department 1/	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under: 5.0-: 5.9	6.0-: 6.9	7.0-: 7.9	8.0-: 8.9	9.0-: 9.9	10.0-: 10.9	11.0-: 11.9	12.0-: 12.9	13.0-: 13.9	14.0-: 13.9	15.0-: 14.9
5.0	5.9	6.9	7.9	8.9	9.9	10.9	11.9	13.0	14.0	Total
1	0	2	0	0	1	0	1	0	0	2
2	0	1	0	0	1	2	1	0	0	6
3	0	0	1	3	1	0	0	2	1	10
4	0	0	1	1	0	1	2	0	1	0
5	1	1	0	0	1	0	0	1	0	4
6	0	2	1	2	0	0	0	0	0	5
7	0	0	1	2	1	0	1	0	0	5
8	0	0	1	0	1	0	0	0	0	2
10	0	0	1	0	0	0	0	0	0	1
Total number of stores reporting 2/	1	6	5	9	4	5	4	3	4	45

1/ No stores were visited which hired 9 full-time employees in the meat department.  
 2/ One store did not provide sales data.

Table 28.--Relationship between weekly hours operated and wage bill for labor shown as a percentage of sales, 1956

Hours per week meat department operated	Stores reporting percentages--									
	Under: 5.0-:	6.0-:	7.0-:	8.0-:	9.0-:	10.0-:	11.0-:	12.0-:	13.0-:	14.0-:
5.0	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9
5.5	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.9
6.0	0	0	0	0	0	1	0	0	0	0
6.2	0	0	0	0	0	0	0	0	0	0
6.5	0	0	0	0	0	0	0	0	0	0
6.8	0	0	0	0	0	0	0	0	0	0
7.0	0	0	0	0	0	0	0	0	0	0
7.2	0	0	0	0	0	0	0	0	0	0
7.5	0	0	0	0	0	0	0	0	0	0
7.8	0	0	0	0	0	0	0	0	0	0
8.0	0	0	0	0	0	0	0	0	0	0
8.2	0	0	0	0	0	0	0	0	0	0
8.5	0	0	0	0	0	0	0	0	0	0
8.8	0	0	0	0	0	0	0	0	0	0
9.0	0	0	0	0	0	0	0	0	0	0
9.2	0	0	0	0	0	0	0	0	0	0
9.5	0	0	0	0	0	0	0	0	0	0
9.8	0	0	0	0	0	0	0	0	0	0
10.0	0	0	0	0	0	0	0	0	0	0
10.2	0	0	0	0	0	0	0	0	0	0
10.5	0	0	0	0	0	0	0	0	0	0
10.8	0	0	0	0	0	0	0	0	0	0
11.0	0	0	0	0	0	0	0	0	0	0
11.2	0	0	0	0	0	0	0	0	0	0
11.5	0	0	0	0	0	0	0	0	0	0
11.8	0	0	0	0	0	0	0	0	0	0
12.0	0	0	0	0	0	0	0	0	0	0
12.2	0	0	0	0	0	0	0	0	0	0
12.5	0	0	0	0	0	0	0	0	0	0
12.8	0	0	0	0	0	0	0	0	0	0
13.0	0	0	0	0	0	0	0	0	0	0
13.2	0	0	0	0	0	0	0	0	0	0
13.5	0	0	0	0	0	0	0	0	0	0
13.8	0	0	0	0	0	0	0	0	0	0
14.0	0	0	0	0	0	0	0	0	0	0
14.2	0	0	0	0	0	0	0	0	0	0
14.5	0	0	0	0	0	0	0	0	0	0
14.8	0	0	0	0	0	0	0	0	0	0
15.0	0	0	0	0	0	0	0	0	0	0
Total number of stores reporting 1/	1	6	5	9	4	5	4	3	4	5

1/ One store did not provide sales data.

Table 29.--Importance of overtime payments in comprising total wage bill

Weekly overtime wage bill: shown as a percentage of: total weekly wage bill	Stores reporting in--				
	San Francisco	Chicago	Columbia	Atlanta	4 cities
	Number	Number	Number	Number	Number
None .....	4	3	10	8	25
1.0 to 4.9 percent .....	2	3	0	2	7
5.0 to 9.9 percent .....	2	0	0	1	3
10.0 to 14.9 percent .....	0	3	0	2	5
15.0 to 19.9 percent .....	2	2	0	0	4
20.0 to 24.9 percent .....	1	1	0	0	2
.....	.....	.....	.....	.....	.....
Total number of stores reporting .....	11	12	10	13	46

Table 30.--Wage bill for direct labor shown as a percentage of sales,  
by type of selling methods, 1956

Wage bill as percentage of sales	Stores reporting		
	Self-service		Total
	Number	Number	
Under 5.0 percent .....	1	0	1
5.0 to 5.9 percent .....	2	4	6
6.0 to 6.9 percent .....	4	1	5
7.0 to 7.9 percent .....	6	3	9
8.0 to 8.9 percent .....	1	2	3
9.0 to 9.9 percent .....	1	5	6
10.0 to 10.9 percent .....	0	4	4
11.0 to 11.9 percent .....	0	3	3
12.0 to 12.9 percent .....	0	4	4
13.0 to 13.9 percent .....	0	1	1
14.0 to 14.9 percent .....	0	1	1
15.0 percent and over .....	0	2	2
.....	.....	.....	.....
Total number of stores reporting 1/ .....	15	30	45
.....	.....	.....	.....
Median .....	Percent	Percent	Percent
Median .....	7.1	10.1	8.6
.....	.....	.....	.....
Mean .....	Percent	Percent	Percent
Mean .....	6.9	11.1	9.7
.....	.....	.....	.....

1/ One store did not provide sales data.

### Selling Methods

Both self-service and service meat markets were included in this survey. Stores were classified as self-service if any portion of the sales in the meat department was self-service and if the owner or manager of the store considered the meat department as a self-service department. Many managers reported their operations were "semi-self-service," and these have been tabulated as self-service stores. The union agreement in the Chicago area provided that a store be classified as self-service "if any fresh or frozen beef, veal, lamb, mutton, or pork are made available for sale on a prepackage self-service basis, even though there is also a service counter offering custom cutting for those who prefer it."

In contrast with all stores included in the survey, for which the median wage bill was 8.6 percent of sales, the median for self-service stores was 7.1 (table 30). The median percentage was 10.1 in service stores.

### APPENDIX

The degree of union organization, wage rates paid to employees engaged in handling meat in retail stores, and provisions contained in collective bargaining agreements between management and labor were considered in selecting the four cities for the survey. These four cities represented wide variations in these factors.

The objective in analyzing these data was to determine the magnitude of wage payments measured in absolute amounts as well as in relation to sales and to attempt to determine the general effect on the wage bill of wage rates and certain other variables such as payment of overtime, use of part-time workers, degree of unionization, and method of selling.

A week between March and October 1956 was selected for collection of data. If the week selected were not considered to be typical by the store owner, he was requested to give wage and sales data for a typical week.

In an effort to relate the wage bill for direct labor for 1 week to sales of the meat department for that same week, the data have been treated in percentage form. This percentage was computed by dividing the wage bill for all man-hours of all paid employees worked during the week, including overtime, by the total dollar sales for that week. Both the wage bill and sales were available in dollar terms. Although some variation in meat sales could be expected from week to week, this did not explain all the variation that was observed among stores in the percentage of sales for which the wage bill accounted.

In 4 stores, meat sales were obtained for 3 different weeks. Assuming the wage bill to have been the same each week, the wage bill shown as a percentage of sales would have varied as follows:

	<u>Store No. 1</u>	<u>Store No. 2</u>	<u>Store No. 3</u>	<u>Store No. 4</u>
First week	7.4	9.4	6.8	7.8
Second week	7.4	12.4	7.7	9.0
Third week	7.5	9.7	7.2	7.2

An analysis of variance among cities was made for each of the following: Meat sales per man-hour, wage bill per man-hour, and percentage wage bill was of sales. The first two of these analyses indicated there was a significant difference among cities at the 1-percent level. However, on the last of these three analyses--that of wage bill as a percentage of sales--no significant difference was observed at the 1-percent level.

An analysis of variance between union and nonunion stores of the wage bill shown as a percentage of sales showed no significant difference at the 5-percent or 1-percent level. An analysis of variance among groups of stores having different sales volume showed a significant difference at the 1-percent level. Stores were grouped into those having meat sales of (1) under \$100,000 per year, (2) \$100,000 to \$199,999 per year, (3) \$200,000 to \$399,999 per year, and (4) \$400,000 per year and over. An analysis of variance among groups of self-service stores as contrasted with service stores showed a significant difference at the 5-percent level.

The relationships between variables also were shown by correlation. Lines of regression have been drawn for: Man-hours and wage bill for a 1-week period for stores in each of the cities selected (fig. 2), weekly meat sales in dollars and wage bill for stores in each of the cities selected (fig. 3), meat sales in pounds and man-hours for all stores included (fig. 4), and man-hours and meat sales in dollars for stores in each of the cities selected (fig. 5).

In Stores in Four Cities for 1 Week in 1956

## RELATIONSHIP BETWEEN WAGE BILL AND MAN-HOURS FOR RETAILING MEAT

WEEKLY WAGE BILL (DOLLARS)

COLUMBIA

$r = .97$   
 $y = -.35 + 1.0954 x$

ATLANTA

$r = .99$   
 $y = -6.992 + 1.6426 x$

CHICAGO

$r = .99$   
 $y = 18.5951 + 2.2977 x$

SAN FRANCISCO

$r = .97$   
 $y = 22.4949 + 2.3669 x$

Stores in

▲ Chicago

+ Atlanta

● San Francisco

■ Columbia, S.C.

Chicago

San Francisco

Atlanta

Columbia

The standard error of the estimate for each of  
the cities is as follows:

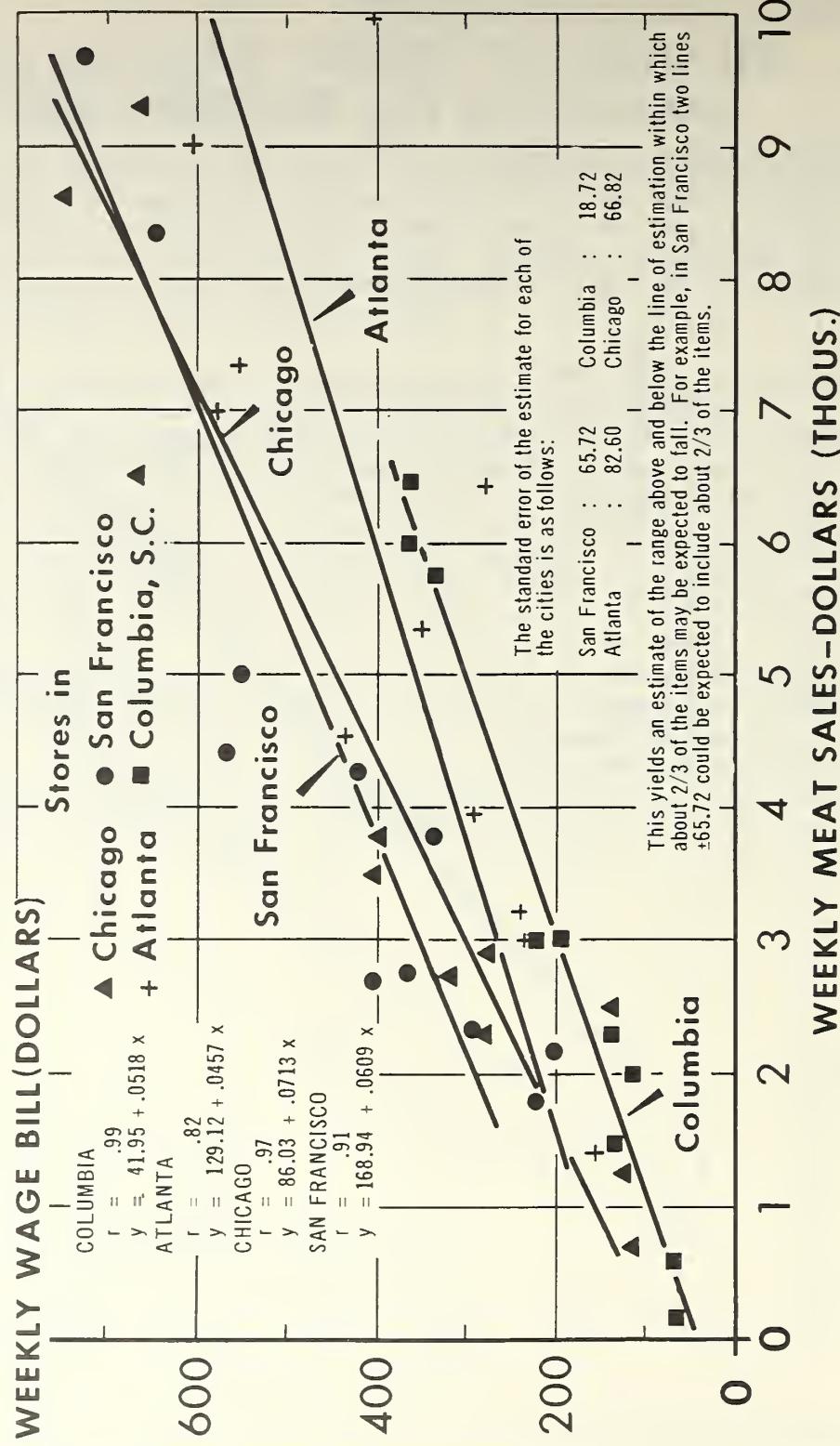
San Francisco: 40.85      Columbia: 25.61  
Atlanta : 25.39      Chicago : 16.84

This yields an estimate of the range above and below the line of estimation within  
which about 2/3 of the items may be expected to fall. For example, in San Francisco two lines  
 $\pm 40.85$  could be expected to include about 2/3 of the items.

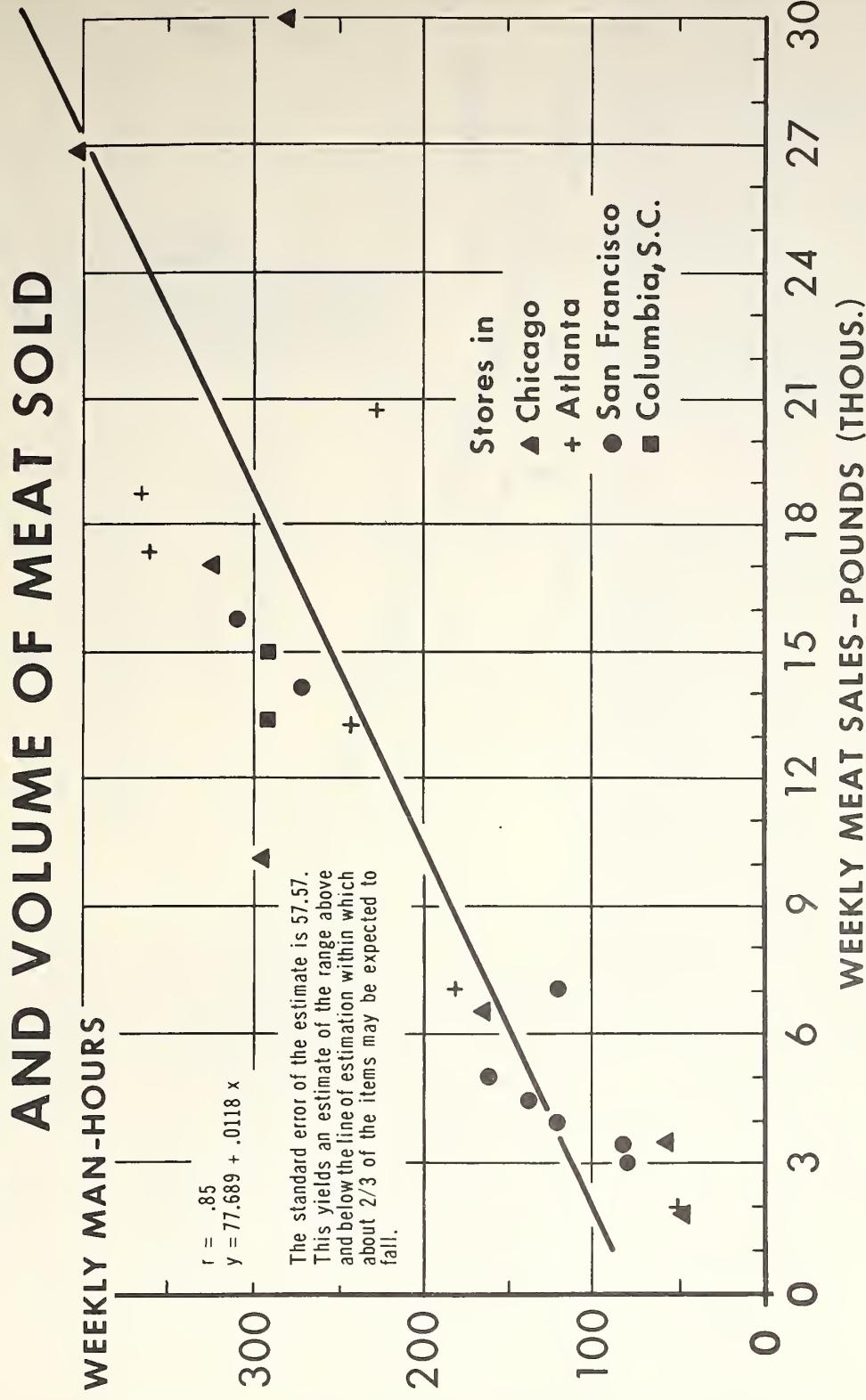
WEEKLY MAN-HOURS

*In Stores in Four Cities for 1 Week in 1956*

## RELATIONSHIP BETWEEN WAGE BILL AND VALUE OF MEAT SALES



## RELATIONSHIP BETWEEN MAN-HOURS AND VOLUME OF MEAT SOLD



In Stores in Four Cities for 1 Week in 1956

## RELATIONSHIP BETWEEN MAN-HOURS AND VALUE OF MEAT SALES

